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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,055	11/21/2003	John M. Williams	2478.2018-001	9135

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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER	
GEMBEH, SHIRLEY V	
ART UNIT	PAPER NUMBER
1614	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,055	WILLIAMS, JOHN M.	
	Examiner	Art Unit	
	Shirley V. Gembeh	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The response filed **01/04/07** presents remarks and arguments to the office action mailed **06/02/06**. Applicants' request for reconsideration of the rejection of claims in the last office action has been considered.

Applicants' arguments, filed 1/04/07, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "transplanted organ, tissue or cell in a subject" (e.g., instant claim 1, lines 1-2) which is unclear as to whether the limitation "transplanted" only applies to an "organ" and not to "tissue" or "cell in a subject". In the interpretation that "transplanted" does not limit "tissue" or "cell" , then a GVHD rejection reaction in a patient would read on an embodiment of the instant claims.

Maintained Claim Rejections - 35 USC § 102

Claim 1-26 are rejected under 35 U.S.C. 102(a) as being anticipated by Sneddon et al. WO 01/87849.

Applicants' argument together with the interview and affidavit supplied has been acknowledged and very carefully considered with regards to the above rejection.

The claims recite rejection of a transplanted organ, tissue or cell. The rejection is maintained because GVHD as taught by a cited reference. In GVHD, transplantation is done with bone marrow cell-which is interpreted by the Examiner to be a tissue or a cell and this is well within the claim limitation scope. It is the Examiner's view point that the risk of developing GVHD is attributed to a number of factors and that the risk increases with increasing amounts of lymphoid tissue being transferred and the order of risk depends on the organ being transplanted as evidenced by Jamieson et al. (Transplant Int. (1991) 4:67-71) (see pg 70-highlighted).

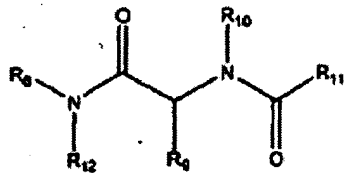
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneddon et al. WO 01/87849 taken with Sviland et al J. Clin. Pathology 1999, 52:910-913 in view of Jamieson et al. (Transplant Int. (1991) 4:67-71).

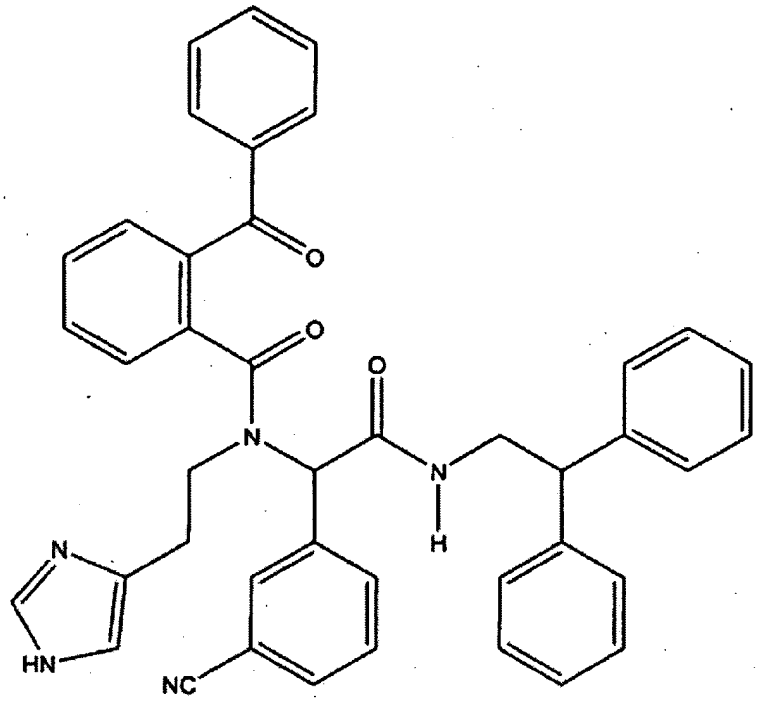
Sneddon discloses current claims 1 and 2, a method of inhibiting tissue

transplant, as graft versus host disease, (see page 14, line 30), administering the compound of formula I  wherein the substituents are the same as that of the claimed subject matter. See table below

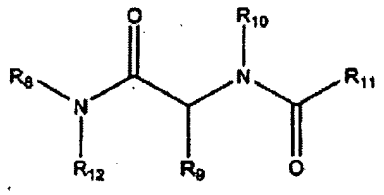
Reference	instant	Data set
R_{11}	R_3	Substituted/unsubstituted alkyl
R_{10}	R_2	substituted arakyl
R_1	R_9	substituted arakyl
R_{13}	R_4	substituted alkyl
R_8	H	H

Sneddon discloses current claims 4-8, wherein, R4 = R12 is a substituted aryl group at page 82, line 7, and as in current claim 5 wherein R4 is a substituted phenyl group at page 97 line 2, and a benzyl as in current claim 6. Sneddon also discloses current claims 7 and 8, wherein R1 = R9 is C1-C4 is either a substituted aryl/alkyl group (see page 82 line 10) and claim 9 a substituted aryl group, and an optionally substituted phenyl group as in claim 10. The reference discloses (see page, 52 table 1 compound 1, subsequently claims 11-23 are obvious.

Sneddon also discloses administering the compound of current claims 24-25



(see page 87) to a patient with graft versus host disease (see page 14 line 30). With



regard to current claim 26 (see page 96) where the substituents of R for example R_{13} in the instant claim is represented by R_{11} are the same-substituted alkyl, R_{12} is R_{10} in the cited reference is alkyl, R_{11} is R_9 etc.

Sviland et al. teach GVHD is a complication following bone marrow transplantation (see abstract, wherein (tumor necrosis factor-alpha)TNF-α are important mediators of the cellular damage. (see abstract also).

One of ordinary skill in the art would have been motivated to combine the cited art use the compounds taught by Sneddons' reference with that of Sviland et al. to treat bone transplantation that is mediated by TNF-α and expect to be successful in doing so because, the Sneddon et al. reference teaches that these cytokines play important role in mediating cellular damage.

Jamieson et al. teach that GVHD is a solid organ transplantation effect. The claims recite transplantation of an organ, tissue or cell (see abstract-highlighted sec.). This is well within the claim limitation.

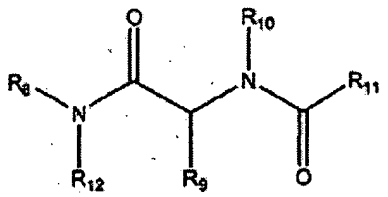
One of ordinary skill in the art would have combined the cited art references and used the Sneddon et al. compound to treat organ transplant because the motivation comes clearly from Jamieson et al. Therefore one of ordinary skill in the art would expect a successful result in using the compounds of Sneddon et al. to treat organ transplantion because Sneddon et al. has used the compound for GVHD treatment and Jamieson teaches the GVHD is an organ transplant effect.

Thus, the claimed invention was prima facia obvious to make and use at the time it was made.

Maintained Double Patenting

Claims 1-26 remain provisionally rejected under the judicially created doctrine of double patenting over claims 1-20 of copending Application No. 10/719,701 (recently allowed).

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: The claims are drawn to a composition and method of inhibiting rejection of a transplant organ composition, using formula



in the instant claim with rapamycin or CD40L. The only difference between the instant application and the co-pending application is in the instant claim adjuvant therapy is used while the co-pending claims treat the condition with only the compound of formula I. Thus the claims of the instant application are anticipated by the co-pending application.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley V. Gembeh whose telephone number is 571-272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ardin H Marschel 4/2/07

SVG
3/29/07

ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER